UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S)   ZOSO, LUCIANO   GROUP ART UNIT: 2193

APPLN. NO.:   10/730174   EXAMINER: Chat C. Do

FILED: 12-08-2003

TITLE: HARDWARE FOR PERFORMING AN ARITHMETIC FUNCTION

Certificate of Submission

    I hereby certify that this correspondence is being submitted to the USPTO, Alexandria, VA.

☐ Addressed per C.F.R.§ 1.1(a) and deposited with the United States Postal Service with sufficient postage as first class mail.

☐ Facsimile transmitted in accordance with C.F.R.§1.6(d).

☒ Submitted electronically via EFS in accordance with "Legal Framework for EFS Web".

                9-26-07

Date of Submission

/Stacie Herrera/
Signature

  Stacie Herrera
Printed Name of Person Signing Certificate

STATEMENT FOR REASONS FOR PRE-APPEAL BRIEF REVIEW

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

      Responsive to the Final Office Action dated July 11, 2007, please enter the following remarks in the above-entitled application, without prejudice or disclaimer.

STATEMENT

In the Office Action the Examiner rejected claims 6-18 and 20-22 under 35 U.S.C. 101 as being directed to non-statutory subject matter. Applicants submit that the apparatus claims, claims 16-18 and 20-22 are directed to statutory subject matter.

Claim 16 has a counter, a comparator, a register means, a storage means, incremental means, and summing means. Thus claim 16 has a counter, a comparator, and four means plus function elements. Means plus function is specifically authorized as a way to claim an apparatus element by 35 U.S.C. 112, sixth paragraph. Simply stated, there is nothing on its face to suggest this qualifies as an algorithm claim. The Examiner, however, viewed this as an apparatus claim that is phrased in a manner so as to preclude all uses of an algorithm, which in this case is a particular algorithm for taking a square root. The fact that it is a circuit implementing an algorithm for taking a square root does not preclude patentability as evidenced by other cases such as US patents 7,167,887; 4,949,296; and 7,139,786.

As pointed out in the application, this is a hardware implementation of performing a square root, especially one that avoids a multiplier. Thus, there is claimed separately identifiable circuit elements that function to perform a square root. Some of these are means plus function elements and describe a circuit having a particular function so that the square root technique is broken into certain identifiable circuit blocks. Two of the claimed elements are claimed as known hardware elements, a counter and a comparator. Although perhaps not optimum, the particular algorithm for achieving a square root used by applicants could be carried out by a processing unit or a microcomputer. In such case, however, there would not be separately identifiable hardware blocks in the manner claimed. Thus, the apparatus claims do not preclude all uses of the algorithm.

In addition, the CAFC cases AT&T v. Excel Commc'ns, Inc. 172 F.3d 1352 (1999) and the just decided In Re Stephen W. Comiskey 2006-1286 (Serial No.09/461,742) (2007) held that hardware implementation of an algorithm was patentable. In fact the court in In Re Stephen W. Comiskey at page 23 even characterized AT&T as "holding patentable a method for determining whether long distance calls being made between long-distance carriers or within a single long-

distance carrier that used a mathematical algorithm and 'require[d] the use of switches and computers.'"

Accordingly, applicants submit that claim 16 and the claims dependent on claim 16 are for patentable subject matter and meet the requirements of 35 U.S.C. 101.

No amendment made was related to the statutory requirements of patentability unless expressly stated herein. No amendment made was for the purpose of narrowing the scope of any claim, unless Applicant has argued herein that such amendment was made to distinguish over a particular reference or combination of references.

Applicants believe the application is in condition for allowance which action is respectfully solicited. Please contact the below-signed if there are any issues regarding this communication or otherwise concerning the current application.

If Applicant has overlooked any additional fees, or if any overpayment has been made, the Commissioner is hereby authorized to credit or debit Deposit Account 503079, Freescale Semiconductor, Inc.
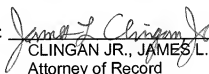
Respectfully submitted,

SEND CORRESPONDENCE TO:

Freescale Semiconductor, Inc.
Law Department

Customer Number: 23125

By: _____
CLINGAN JR., JAMES L.
Attorney of Record
Reg. No.: 30,163
Telephone: (512) 996-6839
Fax No.: (512) 996-6854